

FROM GALEN TO ALEXANDER, ASPECTS OF MEDICINE AND MEDICAL PRACTICE IN LATE ANTIQUITY*

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When, in the sixteenth century, the monks of the Great Lavra on Mt. Athos commissioned a new scheme of paintings for their refectory, one wall was covered with a magnificent tree of Jesse, with, at its foot, various pagan sages who, in some way, had foretold the truth of Christian doctrine. Prominent among them, between Aristotle and the Sibyl, stands Galen the righteous healer.¹ How this physician, born in A.D. 129, came to figure in such a parade of witnesses is a long and complicated story which, at its lowest level of explanation, graphically illustrates the place of medicine in Byzantine society as subordinate to theology, yet necessary. Byzantine medicine, which is traditionally taken to mean the medical theories and practices which are found in the Roman Empire from the fourth century onwards, is by no means easy to categorize. Few handbooks give it more than a passing mention, usually in despair at the paucity of accessible material, and even modern scholarly articles are depressingly few. The old survey by Iwan Bloch still retains its value as a description of a slowly changing system of medicine allegedly embedded

in an almost equally static society.² Yet this state of affairs is a measure of our failure to exploit an abundance of material from a variety of sources, pagan and secular, Greek, Syriac, and Arabic, medical, theological and historical. Above all, with but rare exceptions, historians of medicine have been content to go over the same ground and to reach the same conclusions, without looking beyond a few limited sources or employing their critical faculties as historians.

My survey of the medicine in late antiquity has two aims: first, to suggest some guidelines for the study of Byzantine medicine; and secondly, to locate the medicine of late antiquity firmly within its social and intellectual context. Such a programme would be indeed vast, yet because several of the papers in this volume will take up and develop many of the particular points I wish to make in this introduction, I shall confine myself to setting out some of my general conclusions and leave the detailed discussion to others. This has the advantage that the links and interactions between the various aspects of medicine and medical practice may stand out clearer in this broad survey, and that general considerations that affect the whole of the medicine of the Byzantine world can be spelled out before some of their particular emphases are described. A chronological division in the mid-sixth century also allows the historian to observe both short- and long-term trends, which can become obscured or disappear if viewed in the context either of a single generation or of the many centuries that separate the foundation of Constantinople from the Muslim Conquest. The neglect of Byzantine medicine owes not a little to this chronological com-

[The reader is referred to the list of abbreviations at the end of the volume.]

*I am grateful to John Scarborough and Ihor Ševčenko for help and advice. My greatest debt is to the late A. H. M. Jones, who first introduced me to the problems and delights of late antiquity.

¹Photographs in G. Millet, *Monuments de l'Athos*, I, *Les peintures* (Paris, 1927), pl. 151; P. Huber, *Athos* (Zürich, 1969), pl. 193; P. Yiannias "The Wall Paintings of the Lavra" (Diss., Univ. of Pittsburgh, 1971), pl. H.1 (curiously calling Galen Palenos, p. 289). A much earlier painting, "in Byzantine style," from the cathedral at Anagni in Southern Italy shows both Hippocrates and Galen; A. Cherubini, *I medici scrittori dal XV al XX secolo* (Rome, 1977), 27. On the function of pagan sages in such paintings, see, e.g., C. Mango, "A Forged Inscription of the Year 781," *Zbornik Radova*, 8 (1963), 201–207; G. Nandris, *Christian Humanism in the Neo-Byzantine Mural Painting of Eastern Europe* (Wiesbaden, 1970), 24–44, but this account is somewhat confused.

²Iwan Bloch, in M. Neuburger, J. Pagel, *Handbuch der Geschichte der Medizin* I (Jena, 1902), pp. 481–588. The survey of medical literature by Hunger, "Medizin," 263–320, updates Bloch for the purely literary medical evidence.

pression of a millennium or more into a few pages, in which, almost inevitably, slow developments of doctrine or therapies are transformed into a solid, unyielding and unchanging monolith. By being viewed within a particular historical context, Byzantine medicine takes on a more dynamic form, and some of the anachronisms that have bedeviled its study can be eliminated.

The most obvious difference between the medicine of the second and that of the sixth century A.D. can be summed up in one word, Galenism, in both its positive and its pejorative meanings. Instead of the variety of great names that can be cited for the second century—Galen, Rufus, Soranus, Antyllus, maybe even Aretaeus—and the evidence from both literary and epigraphic texts for new interests and ideas on surgery, the fourth and later centuries present us with a dull and narrow range of authors—the summarizers, the encyclopaedists—who have been studied not for themselves but for the earlier sources they happen to encapsulate. Oribasius, Aetius, Alexander, Paul are the medical refrigerators of antiquity: we are concerned with their contents, not their mechanics or their design. Yet this is our fault, not theirs. Ancient historians have long enjoyed the advantages of Whiggishness, without its reproaches. We can happily talk about Hippocratic medicine and its medical achievements in the same breath, because almost everything in the *Corpus* counts as an achievement through being the earliest recorded example in Europe of, for example, the connection of tuberculosis and a hunched back. We can accept Galen almost without question at his own estimation, because his own ideas on medicine, on research, on progress, coincide to a great extent with our own; and we can warm to a man whose stated commitment to the truth above all else would not be out of place today. Yet, faced with the great compendia, we find it difficult to understand them, apart from noting the range of their sources. There is no obvious commitment to research, to private investigation, even to argument and criticism. In them medicine appears to stand still, somehow to be frozen, to return to my earlier metaphor of the refrigerator. We are in a quandary also because our conception of how medicine works has changed drastically; and it is not surprising that the last major work of medico-historical value to be done on them was over a century ago by Francis Adams, whose third and final volume of his great translation of Paul appeared in 1847. The reason for this is simple: to Adams, Paul was transmitting a living

medicine, one that could still be used in his daily practice in Scotland, and it was precisely for this reason that Adams, on the basis of his own experience as a doctor, could reach such a sound judgment on the merits of this compiler.³

We should approach the problem of the medical learning of these encyclopaedists of late antiquity with a variety of questions. Obviously, we must be interested in the sources they had at their disposal, and it is entirely legitimate to draw conclusions from them as to the spread of Galenism in late antiquity. It is indeed a lengthy process, largely illuminated for us by Owsei Temkin, and its outlines are clear.⁴ Galen already enjoyed a high reputation in his own lifetime, certainly in the Greek-speaking half of the Empire. Theodotus the shoemaker, Athenaeus of Naucratis, and Alexander of Aphrodisias, in their own ways, attest his influence among his contemporaries as doctor and philosopher.⁵ Some of his philosophical writings enjoyed lasting fame. As late as the fifth century, Marinus of Siche, the biographer and pupil of Proclus, is said to have dissented from his master's views on Plato's Parmenides in favor of the erroneous ones of Galen and Firmus.⁶ Later still, Galen's scientific writings were known, in part, to Philoponus, and some of his little tracts on logic and morals have come down to us in Greek or in Arabic.⁷ If Galenic philosophy retained some influence, Galenic medicine was far more important. It is clear that Oribasius, for example, took Galen as his main source, supplementing him, where necessary, as with his comments on the plague, from other authors such as Rufus of Ephesus.⁸ This was not a purely personal decision by Oribasius, a mere whim. It reflected

³Paul (trans. Adams), *passim*. The German version of Paul, by J. Berendes, *Des besten Arztes sieben Bücher* (Leiden, 1914), though useful, lacks a substantial commentary. Recent scholarship has added little to the older assessment of Adams by C. Singer, "A Great Country Doctor: Francis Adams of Banchory," *BHM*, 12 (1942), 1–17.

⁴O. Temkin, *Galenism* (Ithaca and London, 1973). See also his articles: "Geschichte des Hippokratismus im ausgehenden Altertum," *Kyklos*, 4 (1932), 1–80; "Byzantine Medicine: Tradition and Empiricism," *DOP*, 16 (1962), 97–115 (= *The Double Face of Janus* [Baltimore and London, 1977], 202–22).

⁵O. Temkin, *Galenism*, 55–61: *contra*, J. Scarborough, "The Galenic question," *SA*, 65 (1981), 1–31. I shall confirm Temkin's assessment, with new material, in a forthcoming article in *BHM*, 1984.

⁶Damascius, *Vita Isidori*, in Photius, *Bibl.* 351B. For Galen and Hippocrates as philosophers, cf. Gregory Nazianzen, *Or.* VIII.20.

⁷For Philoponus, see R. B. Todd, "Philosophy and Medicine in John Philoponus' Commentary," in this volume; for the Arabs, cf. G. Strohmaier, "Galen in Arabic: Prospects and Projects," in Nutton, ed., *Galen: Problems*, 187–96.

⁸Cf. H. Mercurialis, *De peste . . . praelectiones* (Basle, 1577), 11.

the growing importance of Galen, and the belief, easily induced by Galenic rhetoric, that he had somehow defined and completed medicine. Hippocrates sowed, Galen reaped, says one commentator;⁹ all that was left to others was thus gleanings from the stubble.

Yet the encyclopaedists were not just compilers; they had to select. They were constantly adding fresh material or compressing the old; they were not dumb copyists. My reading of Oribasius fills me with admiration for his broad knowledge of Galen, for his ability to summarize and yet keep in as much of the original as possible, and, most importantly in an age that valued rhetoric highly, for his skill in expressing its essentials clearly. It is this sort of categorization that we should employ when looking at the compendia, to try and see them on their own terms, and to judge them on their ability to put across an effective message. They must be seen as the equivalent of Osler's *Principles and Practice of Medicine*, not of a research monograph.

It is in this light, too, that we should approach such authors as Cassius Felix, Magnus of Nisibis and Caelius Aurelianus, enough of whose writings survive to enable us to form a reasonably critical judgment on them. They have in the past been dismissed crudely as translators, or mere abbreviators, of earlier writings by Galen or Soranus.¹⁰ But this is far too simple. Jackie Pigeaud's recent work on Caelius has shown how that author adapts his material, occasionally criticizes it, and produces a large work of considerable elegance and effectiveness.¹¹ Magnus of Nisibis was celebrated for his rhetoric and his logic, though his practical abilities and experience, to say nothing of his character, were less impressive.¹² His book on urines, which survives in Arabic and in part in the second volume of Ideler's *Physici et Medici Graeci*, and which is a restatement of Hippocratic and Galenic doctrine, was highly regarded by succeeding generations. It was mentioned by Theophilus, for whom it was a major source, and by Johannes Actuarius; it was translated into Arabic, and, finally, excerpted by

Byzantine doctors.¹³ Theophilus' mild criticism does not justify the almost total neglect of Magnus by modern scholars, and in fact it tells us what Magnus' audience was looking for. He is praised for his attempts to systematize and arrange in order the various urines, by their types and by their differences, but condemned for failing to include all their diagnostic and prognostic indications. His teaching was therefore left incomplete (partly from his lack of first hand experience), but his was the argument and organization followed by subsequent writers on the subject.¹⁴ As Gerhard Baader has pointed out, in earlier diagnostic theory uroscopy plays a very minor part—although Galen's practice in no way neglected it—whereas late antiquity and the Middle Ages elevated it to being the major guide to diagnosis. In this development the role of Magnus may have been crucial.¹⁵

It would be wrong to conclude, too, that summaries, handbooks, and collections of drugs, such as we find with pseudo-Apuleius and Marcellus Empiricus, are new phenomena in late antiquity. One of the most important of the lost works of Rufus was his big compendium *For the Layman*, to which may be plausibly attributed many short excerpts preserved under his name by later encyclopaedists.¹⁶ Galen summarized not only his own books on pulses but also the *Anatomy* of Marinus and various Platonic dialogues, and his *Therapeutics, for Glaucon*, was deliberately designed as a brief introduction to medicine for a layman.¹⁷ Scribonius Largus and Marcellus Empiricus are separated as authors of recipe collections only by the centuries, not by any development in their aims and methods.¹⁸ Yet one significant development which *can*

¹³Theophilus, *De urinis*, pref. (p. 261 Ideler); Johannes Actuarius, *De urinis* 1.2 (p. 5 Ideler). For manuscripts and the later revisions and editions, see Galen (ed. Kühn), XIX. 574–601, 602–608; Anonymous, *De urinis*, pp. 307–16 Ideler; H. Diels, *Die Handschriften der antiken Ärzte*, II (Berlin, 1906), 59 f.; F. Sezgin, *Geschichte des arabischen Schrifttums*, III (Leiden, 1970), 165 f.; M. Ullmann, *Die Medizin im Islam* (Leiden, 1970), 81 f.

¹⁴Theophilus, *De urinis*, pref. (p. 261 f. Ideler).

¹⁵G. Baader, "Early Medieval Latin Adaptations of Byzantine Medicine in Western Europe," in this vol. Hence the translation into Greek of Avicenna's chapters on urine, pp. 286–302 Ideler; and of similar books in Syriac and Persian, pp. 303–16 Ideler. For Galen's practice, cf. Nutton, ed., *Galen: On Prognosis*, 2 (CMG V 8.1, p. 80), but undoubtedly it is by the pulse that Galen mainly made his diagnoses, and his interest is more in the quantity and frequency of urination than in the quality of urine.

¹⁶So, rightly, J. Ilberg, "Rufus von Ephesos. Ein griechischer Arzt in trajanischer Zeit," *AbhSächsAkadWiss* (1931), 45 ff.

¹⁷Galen, XIX.25–30 K.; XIX.46 K.; XIX.31 K.

¹⁸The arguments of P. Brown, *The Cult of the Saints* (London and Chicago, 1981), 113 ff., on the place of Marcellus Empiri-

⁹Palladius, *In Epid. VI scholia*, p. 157 Dietz.

¹⁰E.g., I. E. Drabkin, "Soranus and His System of Medicine," *BHM*, 25 (1951), 503–18.

¹¹J. Pigeaud, "Pro Caelio Aureliano," *Mémoires du Centre Jean Palerne*, 3 (1982), 105–17. A similar conclusion has been reached by G. Harig and D. Nickel in their preparatory studies for a new edition of Caelius in the *CML* series.

¹²Eunapius, *Vit. phil.* 497 ff.; Philostorgius, *Hist. eccl.* VIII.10; Libanius, *Ep.* 497; for his character, see Libanius, *Epp.* 1208, 1358.

be discerned in late antiquity is the accentuation of the divorce between practical and theoretical texts. Magnus of Nisibis was clearly a theoretical professor, and recent studies on John of Alexandria and Agnellus have shown how their lectures became more and more devoted to extensions of theory, rather than to practical purposes.¹⁹ But this tendency was not itself new; Galen complained about it in his own day, and the format of lectures and commentaries on particular texts only encouraged this sort of logical or philological specialization.²⁰ I wonder, too, whether the magnitude of Galen's own achievement, with its stress on the indissoluble unity of theory and practice, did not frighten succeeding generations of scholars with the thought of the learning needed to combat Galen *in toto* and, at the same time, console them by suggesting that a concentration on one aspect of medicine would necessarily bring about improvements in others.

Yet it would be foolish to deny the effect of Galenism, an effect so powerful that a poet could, in a wonderful trope, refer to Christ as a second (and neglected) Galen.²¹ Hippocrates comes to be studied through Galen's eyes, even through Galen's text,²² and the theories of his opponents are pushed to the fringes of the scientific community, to Latin-speaking Africa and the collectors of popular scientific curiosities, the *Problemata*, like pseudo-Alexander and Cassius the Iatrosophist.²³ Other medical sects passed peacefully away. The last recorded Greek doctor who claimed to be a follower of Asclepiades lived around 350 A.D., and I prefer to believe that those doctors on Byzantine epitaphs who call themselves "men of the spirit," πνευματικοί, are confessing their faith rather than their medical learning.²⁴ Not that we should regard the

medicine of the late antiquity simply as a degenerate form of Galenism. There were bold spirits prepared to put forward their own ideas—Alexander of Tralles, for example, and Jacobus Psychrestus. This great philosopher, beloved by emperor and people alike, honored with statues at Athens and Constantinople, who ordered the rich to aid the poor, who treated those in poverty without fee, relying only on the *annonae* given him as a civic doctor, this paragon of learning and experience gained his fame, his influence and indeed his nickname, Psychrestus, from a radical new technique. He treated his patients with cooling waters, as a means of reducing their tensions and worries about money.²⁵ Yet even here we may find an earlier precedent in the Augustan physician, Antonius Musa, whose cold water treatments succeeded in curing the emperor Augustus, but may have hastened the death of his favorite heir, Marcellus.²⁶

Nor does experimentation cease immediately on the death of Galen or in the darkness of the third century. True, we no longer have records of the medical contests at Ephesus, but Nemesisius of Emesa apparently preserves details of the anatomy of the tongue that derive from fourth-century Alexandria.²⁷ A similar conclusion might be drawn from the discussion of the tongue in the pseudo-Galenic *De motibus liquidis*, which, in the form in which it survives, is a Latin translation going back via Arabic to a Syriac original.²⁸ But both Nemesisius and the Syriac author may be deriving their information direct from some lost tract of Galen, and the anatomical progress they show over Galen may therefore be illusory. A detailed programme of anatomical research such as we can see in Galen, and

cus in the Western world of healing are suggestive, but not conclusive. Cf. also B. Merlette et al., "Le manuscrit 420 de Laon et la médecine carolingienne," *Histoire des sciences médicales*, 14 (1980), 51–69.

¹⁹ Agnellus of Ravenna, *Lectures on Galen's De sectis* (Buffalo, 1981); C. D. Pritchett, *Iohannis Alexandrini in librum de sectis Galeni* (Leiden, 1982); cf. O. Temkin, "Studies on Late Alexandrian Medicine," *BHM*, 3 (1935), 405–30 (= *The Double Face of Janus*, pp. 178–97).

²⁰ See, for example, Galen, *CMG* V 10,1, 420 f.; XVIIA.496–524 (*CMG* V 10,2,1, 10–26).

²¹ George of Pisidia, *Hexaemeron*, 1.1588 f.

²² B. Alexanderson, *Die hippokratische Schrift Prognostikon* (Göteborg, 1963), 169; J. N. Mattock, M. C. Lyons, eds. and trans. (Arabic) *Hippocrates: On the Nature of Man* (Cambridge, 1968), vii.

²³ See the evidence collected in my article "The Seeds of Disease: An Explanation of Contagion and Infection from the Greeks to the Renaissance," *Medical History*, 27 (1983), 9–13.

²⁴ From Cibra Minor in Cilicia, *DenkWien*, 102 (1970), 65, n. 38 and pl. 52; on πνευματικοί, *CIG* 9578, 9792; cf. *Vita S. Marthae*, ed. P. Van den Ven (Brussels, 1970) ch. 51.17.

²⁵ *Chron. Paschale*, PG 92.824A; *Suda*, s. Ἰάκωβος; Malalas, *Chron.*, p. 370 Dindorf; Marcellus, *Chron.*, p. 88; Photius, *Bibl.*, 344A; *Suda*, s. Σωρανός (confusing Soranus of Ephesus and Soranus of Mallus?); Alexander, II.163 Puschmann.

²⁶ Suetonius, *Aug.* 59; Cassius Dio, 53.30; cf. F. Atterbury, *Antonius Musa's Character Represented in the Person of Iapis* (London, 1742). A similar therapy was advocated by Charmis of Massilia, Pliny, *NH* 29.5.10, under the emperor Claudius, cf. *ib.* 29.8.22 and Galen, XIV.80.K.

²⁷ For Ephesus, J. Keil, "Ärzteinschriften aus Ephesos," *ÖJh*, 8 (1905), 128–38; *Die Inschriften von Ephesos*, VI, 1160–69. For Nemesisius, *De nat. homin.* 8, 14 (pp. 195 ff., 208 f. Matthiae, cf. p. 404 f.), with the arguments of W. Telfer, *Nemesisius of Emesa, On the Nature of Man* (London, 1955), 331.

²⁸ Ps.-Galen, *De motibus liquidis*, in Galen, *Opera omnia*, ed. R. Chartier (Paris, 1679), V, pp. 400, 403–405. On the question of authenticity, cf. Galen, II.443 K.; XVIIIB.931 K., and the summary of J. C. G. Ackermann, in Galen, I.clxii K. Cf. also the discussion of H. Baumgarten, "Galen, Über die Stimme" (*Diss.*, Göttingen, 1962), 88–93. The problem will be discussed in a forthcoming article by Dr. J. Wollock.

earlier in Rufus and Satyrus, cannot be shown to have survived the fourth century. But before we condemn late antiquity too harshly, we must note that Galen himself believed that anatomy had almost disappeared between the age of Herophilus and Erasistratus and that of Marinus, four hundred years later: the tradition of anatomical research is a very fragile thing.²⁹

One should not, however, confuse the absence of experimental anatomy on the Galenic model with a declining interest in practical techniques, including surgery. John of Ephesus describes a surgeon relieving a painful condition by the permanent insertion of a drainage tube.³⁰ The medical reputation of Alexandria also rested on more than the theoretical content of its lectures. The fourth-century professor Ionicus, according to his biographer Eunapius, was skilled in knowledge of all parts of the body, and possessed great practical skills in surgery and bandaging.³¹ A few years later, a lawyer friend of St. Augustine, Innocentius, who had rejected the advice of two distinguished local doctors at Carthage, was quite prepared to accept it when it came from an Alexandrian doctor, even though it entailed a complicated and painful operation.³² Happily for him, God intervened, and his anal fistula was found to be miraculously healed.

The intervention of God brings me on to my second broad section, the position of medicine and medical men within a Christian society. In a recent article, Darrel Amundsen has strongly argued that, on the whole, Christianity was favorable to medicine, or at any rate, not hostile³³—a conclusion with which I would agree—yet this argument is rather too bland, and misleading on one important point. As Harnack long ago showed, Christianity is a healing religion *par excellence*.³⁴ The New Testa-

ment emphasizes the power of Christ and his apostles to cure diseases, and this was one of the features that secured for Christianity the primacy among competing religions. Similarly, Ramsay MacMullen has recently pointed to the crucial significance of healing miracles in securing the allegiance of intellectual doubters and of the ordinary people to Christianity.³⁵ Yet this Christian healing was not that of the doctors. It succeeded where they had failed, often over many years and at great expense; it was accessible to all; it was simple. It was a medicine of prayer and fasting, or of anointing and the laying on of hands.³⁶ The power to heal was given to Christian elders, and they were to be consulted first in all cases of illnesses.³⁷

There is, thus, a tension, to put it at its lowest, between the model of the New Testament and the real world outside. It is not that Christianity is necessarily opposed to secular healing; but it presupposes an alternative medicine on which true Christians may be expected to rely. How many Christians actually followed this expectation is unknown, and unknowable. But it is a doctrine that surfaces from time to time among the ascetics and among the more fundamentalist Christians like Tertullian, Tatian, Marcion, even Cyprian. But even those who, like St. Basil, knew and approved of secular medicine, were always careful to leave room for this peculiarly Christian type of healing. The tension was almost palpable, and we can find various theologians endeavoring to hold it in balance. One example, chosen at random, is St. Diadochus of Photike, a monk of northern Greece, who wrote his "On Spiritual Knowledge," about 480 A.D.³⁸ In Diadochus' view, there is nothing to stop a Christian calling in a doctor when he falls ill. Divine providence has implanted remedies in nature, and hence human experience has developed the art of medicine. But, all the same, our hope of healing should not be placed in doctors but in the true savior Jesus Christ. Ascetics in monasteries or in towns, because of their environment, cannot always maintain that perfect charity necessary for the efficacy of faith for healing. To them Diadochus recom-

²⁹Galen, XV. 136K; cf. A. Vesalius, *De humani corporis fabrica* (Basle, 1543), fol. 3r.-v.

³⁰John of Ephesus, PO 18, p. 643 f.; see below, pp. 88 f.

³¹Eunapius, *Vit. phil.* 499.; W. C. Wright, the Loeb translator, p. 537, confuses the issue further by translating ἡ καθ' ἑκαστον περὶ αἰσθητικῆς, not as "in every type of experience," but as "in every kind of experiment," with its implications of medical research. But περὶ αἰσθητικῆς is regularly used as the counterweight to λόγος, mere theory.

³²Augustine, *Civ. Dei* XXII.8. Note also the hostile comment of Fulgentius, *Mitologiae*, p. 9 Helm (cf. c. 523), on an Alexandria whose streets were crammed with the stalls of surgical butchers, all killing their patients.

³³D. W. Amundsen, "Medicine and Faith in Early Christianity," *BHM*, 56 (1982), 326–50. Both this article and the excellent collection of essays edited by W. J. Sheils, "The Church and Healing," *Studies in Church History*, 19 (1982), would have benefited from a closer attention to and exposition of the New Testament evidence.

³⁴A. Harnack, "Medicinisches aus der ältesten Kirchengeschichte," *Texte u. Untersuch.* 8.4, 1892, pp. 37–152; H. J. Frings,

"Medizin und Arzt bei den griechischen Kirchenvätern bis Chrysostomos" (Diss., Bohn, 1959) is a very useful collection of primary material.

³⁵R. MacMullen, *Paganism in the Roman Empire* (New Haven and London, 1982), 95 f., 135.

³⁶E.g., Mark, 7.31, Luke, 5.18, 6.18, 8.41, 9.37, 11.14. Cf. Arnobius, *Adv. gent.* 1.45–50.

³⁷James, *Ep.* 5.13–18. A study of patristic exegesis of this passage would repay the effort.

³⁸St. Diadochus of Photike, *On Spiritual Knowledge*, chs. 53–55.

mends that they should not succumb to the deceits and temptations of the devil, who has induced some of them to boast publicly that they have not needed a doctor for many years. But hermits in the desert can draw near the Lord, who heals all kinds of sickness. And moreover, the solitary hermit has the desert itself to provide consolation in his illness. Concern for the body, and worries about illness, indicate that the Christian has not yet emancipated himself from the desires of the flesh, has not yet cultivated the true dispassion that waits joyfully for death as the gateway to a truer life.

This rejection of doctors in favor of spiritual medicine is particularly marked in the Lives of the Saints. Not all of them are as hostile as the biographer of St. Artemius, but throughout there runs a current of dislike of doctors, overtly for their high fees and their failures, which is hardly to be found in similar healing stories from the pagan side.³⁹ Aelius Aristides remained a personal friend of doctors like Satyrus, and doctors contributed generously to healing shrines.⁴⁰

Besides, despite Arnobius' boast that doctors of genius were turning to Christianity, the medical profession was always suspect as a stronghold of paganism and heresy.⁴¹ Oribasius, Agapius of Alexandria, Asclepiodotus of Aphrodisias, Jacobus Psychrestus and his father, these are but a few of the famous doctors of the fourth and fifth centuries whose paganism was overt.⁴² As for Gesius, professor of medicine at fifth-century Alexandria, "whose rhetorical expertise removed all difficulties of medical exposition," and whose diagnosis was "a bright light that would bring a sure relief," he might be officially a Christian, but his sympathies were clearly with his pagan friends.⁴³ He protected the

pagan philosopher Heraiscus after he had tried to defend the oracle of Menuthis from Christian attack, and, says Sophronius, he treated his Christianity lightheartedly. His punishment for announcing that the cures of SS. Cyrus and John were purely natural and not miraculous was to be attacked by a disease that defied all treatment by the doctors. It was only removed after Gesius had made a contrite confession of his impiety.⁴⁴ Fifty years later, John of Ephesus denounced in the persecutions of Justinian an indiscriminate collection of grammarians, sophists, lawyers and, finally, doctors.⁴⁵

Heresy was also linked with medicine. The Adoptionists, led by Theodotus the shoemaker, had even by 210 been led astray by Galen in applying logic (and textual criticism) to their sacred texts.⁴⁶ Later still, the career of Aetius, with its sudden switches from tinker to schoolmaster to doctor and to heretical theologian, offers an interesting example of the ease with which a man of ability and flair could set himself up as a doctor.⁴⁷ Yet even Aetius' bitterest opponent, Gregory of Nyssa, allows that he cured some of his patients and that he made a reputation by intervening in medical debates.⁴⁸ At times too, a priest might be protected by his medical skills, even if his morals were dubious and his theology unsound. Gerontius of Milan, doctor and deacon, defied St. Ambrose's instructions to remain in Milan and await investigation for his claim to have seen a demon, and fled to Constantinople. Powerful friends secured his prefer-

³⁹ *Miracula S. Artemii*, ed. A. Papadopoulos-Kerameus, *Varia graeca sacra* (St. Petersburg, 1909), *passim*, esp. pp. 3, 4, 24, 26. P. Hordern, "Saints and Doctors in the Early Byzantine Empire: the Case of Theodore of Sykeon," *Studies in Church History*, 19 (1982), 1–13, is an excellent and sober survey. H. J. Magoulas, "The Lives of the Saints as Sources of Data for the History of Byzantine Medicine in the Sixth and Seventh Centuries," *BZ*, 57, (1954), 127–50, adds some further details, but is very unreliable. As Hordern rightly emphasizes, not all Christian healers opposed secular healing: the biographer of SS. Cosmas and Damian is glad to acknowledge their expertise (ἐκμελετήσαντες) in Hippocratic and Galenic medicine, although, of course, they regarded the healing sent from god as "safer" (ἀσφαλέστερον), *Vita SS. Cosmae et Damiani*, *AnalBoll*, 1 (1882), *sect.* 4.

⁴⁰ Aelius Aristides, *Or.* 49.8–10.

⁴¹ Arnobius, *Adv. gentes* II.5.

⁴² See on this, A. Moffatt, "Science Teachers in the Early Byzantine Empire: Some Statistics," *Byzantinoslavica*, 24 (1973), 15–18.

⁴³ Photius, *Bibl.* 352B; *Suda*, s. Γέσιος; the quotations come from Aeneas of Gaza, *Ep.* 20, and Procopius of Gaza, *Ep.* 102.

Cf. also Aeneas, *Ep.* 19; Procopius, *Epp.* 16, 102, 122, 125; Zacharias Schol., *De opificio mundi*, PG 75.1016, including him as an interlocutor in his debate on creation, *ib.*, 1060–1106. Of his medical works nothing can be shown to have survived (but note Vatican, Pal. lat. 1090, ff. 1r–42v., commentary on Galen's *De sectis*, elsewhere attributed to Agnellus). Traces of his activity as a commentator can be found in Dietz, II, 343, n. 4; and in G. Bergsträsser, "Hunain ibn Ishāq, 'über die syrischen und arabischen Galen-Übersetzungen'", *AbhKM*, 17.2 (1925), p. 36, n. 101. His name also appears in connection with the vexed question of the *Summaria Alexandrina*, see E. Lieber, "Galen in Hebrew: The Transmission of Galen's Works in the Mediaeval Islamic World," in Nutton, ed., *Galen: Problems*, 167–86, esp. p. 177 with nn. on p. 185.

⁴⁴ Zacharias Schol., *Vita Severi*, PO, 1, 27–32, gives a graphic description of the attack on Menuthis, but without mentioning his friend Gesius. For his part, see Sophronius, *Mirac. SS. Cyri et Iohannis* 30: PG 73.3513–17.

⁴⁵ John of Ephesus, *Eccl. Hist.*, *ROChr*, 2 (1897), 481 f.

⁴⁶ Eusebius, *Eccl. hist.*, V.28: H. Schöne, "Ein Einbruch der antiken Logik und Textkritik in die altchristliche Theologie," *Festschrift F. Dölger*. (Münster, 1939), 252–66; R. Walzer, *Galen on Jews and Christians* (Oxford, 1949), 75–86.

⁴⁷ Philostorgius, *Eccl. hist.* III.15; Sozomen, *Eccl. hist.* III.15.

⁴⁸ Gregory Nyss., *Contra Eunomium* I.42, 45, cf. Philostorgius, *loc. cit.*

ment to the bishopric of Nicomedia, and when the angry Ambrose gained the assistance of John Chrysostom, the patriarch of Constantinople, in deposing him, the inhabitants of Nicomedia made vigorous complaints, praising Gerontius' unstinting use of his abilities among them as a doctor.⁴⁹ They were clearly more concerned for their bodies than their souls, like the Christians who secured the deposition of the orthodox bishop Basil of Ancyra for failing to excommunicate a quack who had killed several patients.⁵⁰

It should not be forgotten that, for long after Constantine's conversion, large parts of the empire remained steadfastly pagan, and that the traditional healing shrines continued for many years to attract large numbers of patients. In England, the shrine of Nodens at Lydney enjoyed its best days in the late fourth and early fifth century,⁵¹ while the Lives of SS. Cosmas and Damian and, in particular, SS. Cyrus and John reveal the vigorous activities of such shrines in Asia Minor and Egypt.⁵² The letters of Libanius make several references to the cult of Asclepius, while the Life of Damascius, from the late fifth century, often mentions pagan healing shrines and, in particular, theurgy, the pagan equivalent of Christian miracle.⁵³

As is well known, Christianity took over from pagan healing cult not only its function as a source of medical treatment but also its language, its imagery, even its sites. *Christus medicus* is a metaphor that has been often studied, and Erich Dinkler has recently discussed the artistic borrowings of Christianity from Asclepius cult.⁵⁴ At Caesarea Philippi a statue traditionally supposed to represent Jesus and the woman with the issue of blood has been plausibly argued to have been either a statue of an emperor with the epithet *Soter*, Savior, or one of

Asclepius.⁵⁵ Pagan shrines became Christian temples. A Christian basilica was constructed at the Asclepieion at Epidaurus; the Asclepieion at Rome is now the church of S. Bartolommeo and the healing spring its font, and churches dedicated to St. Michael often replaced healing shrines to Heracles.⁵⁶ The Christian hatred of these pagan shrines is best attested at Pergamum, where there was a deliberate destruction of all the cult images, big or small, of Asclepius. The result is that our information on them depends on literary descriptions in Galen and on chance survivals of representations of the cult statue from the Black Sea region.⁵⁷

There are borrowings too among pagans from Christianity. The increase in pagan miracles, in theurgy, that is associated with the philosophers and doctors of late antiquity, like the two Asclepiodoti, is in one sense a deliberate reaction against Christian doctrines, and Julian's attempts to impose the cult of Asclepius as the center of paganism can only be understood against a background of Christianity as a healing, missionary religion.⁵⁸ It was Julian also, who, in a famous letter to the high priest of Galatia, encouraged pagans to follow the examples of Jews and Christians in their practical efforts to remedy social problems. Pagans, like their opponents, were to look outwards, and to care for their friends and fellow believers; charity was a means of proselytism.⁵⁹

The early centuries of the Christian empire show a reformation of problems about health and healing. Professor Amundsen has rightly emphasized the new attitudes towards sickness and suffering, which combine the Stoic doctrines of indifference

⁴⁹ Sozomen, *Eccl. hist.* VIII.6.

⁵⁰ *Ibid.*, IV.24. It is perhaps worth noting that, apart from the story told by Galen and preserved only in Arabic (M. Meyerhof, "Autobiographische Bruchstücke Galens aus arabischen Quellen," *SA*, 22 [1929], 83), there is no evidence for prosecution of quack doctors in antiquity, and it may be doubted whether that man was prosecuted or punished for selling dangerous poisons or for impersonating a pupil of the great Galen.

⁵¹ R. E. M. and T. V. Wheeler, *Lydney* (London, 1932).

⁵² J. Geffcken, *Der Ausgang der griechischen-römischen Heidentums* (Heidelberg, 1920) remains fundamental.

⁵³ R. Asmus, *Das Leben des Philosophen Isidoros von Damaskos aus Damaskos* (Leipzig, 1911); E. R. Dodds, *The Greeks and the Irrational* (Oxford, 1950), 283–311.

⁵⁴ E. Dinkler, "Christus und Asklepios," *SBHeid*, 1980.2; K. Hauck, "Gott als Arzt," in C. Meier, U. Ruberg, *Text und Bild: Zwei Aspekte des Zusammenwirkens zweier Künste in Mittelalter und früher Neuzeit* (Wiesbaden, 1980), 19–62. For literary references, see D. W. Amundsen, *BHM*, 56 (1982), 331.

⁵⁵ Eusebius, *Hist. eccl.* VIII.18; cf. the *Passio IV SS. Coronatorum, Acta Sanctorum*, Nov. 3, for the significance to Christians of statues of Asclepius.

⁵⁶ F. Robert, *Epidaure*, (Paris, 1935), 41; M. Besnier, *L'île Tibérine dans l'antiquité* (Paris, 1902), 184–246; J. P. Rohland, *Der Erzengel Michael* (Leiden, 1977), 75–104.

⁵⁷ G. Strohmaier, "Asklepios und das Ei," in *Festschrift F. Altheim*, 2 (Berlin, 1970), 143–53. A further study by Dr. Strohmaier on the artistic representations of the cult at Pergamum is scheduled to appear in the *Proceedings of the Twenty-sixth International Congress of the History of Medicine* (Plovdiv, 1978), but so far only Vol. I has appeared.

⁵⁸ R. Asmus, "Der Neuplatoniker Asklepiodotos der Grosse," *SA*, 7 (1913), 26–42, needs to be supplemented by the epigraphic evidence provided by L. Robert, *Hellenica IV* (Paris, 1948), 119–26. The article by G. Senn, "Asklepiodotos von Alexandria, ein positivistischer Naturforscher des V. Jahrhundert," *Archeion*, 21 (1938), 13–27, is full of errors and misconceptions. For Julian, see the material collected by the passionate P. Athanassiadi-Fowden, *Julian and Hellenism* (Oxford, 1981), 166–70.

⁵⁹ Julian, *Ep.* 22.

to the pains of the body with the idea of the nobility of suffering and of, in some way, it being a test of one's faith.⁶⁰ Suffering is to be more than endured, it is almost to be welcomed. I cannot find in pagan literature anything to compare with Tertullian's view of famine and pestilence as the acceptable will of God and as the rightful cure for the prosperity and population growth he saw around him.⁶¹ Nor would a pagan have advised a frightened congregation, as Cyprian did in 252, to accept a plague joyfully as proof of God's love: for by it the wicked were sent swifter to Hell, and the just would more quickly obtain their everlasting refreshment.⁶² It is true that plague in the pagan world was often seen as the result of divine displeasure, and that the measures taken against it were regularly religious—supplications, vows, public festivals, temple building, and so on—but I cannot imagine a pagan asking the question posed in the *Moral Questions* attributed to Athanasius and summarized in the later collection by Anastasius of Sinai, "Should a man rightly flee from the plague, if, as was possible, it was sent by the wrath of God?"⁶³ The theologians' answer neatly sidesteps the issue: yes, if the plague has a purely natural cause, in the filth and overcrowding of the towns or in the polluted air; but the wrath of God will seek out the sinner everywhere, even in the desert, and in such circumstances, flight is in vain.

The theologians' opening response to this question also indicates some of the dangers of Christianity to the scientific mind. They apologize for talking largely about natural plagues, for they might seem to some to doubt the providence and power of God, who oversees all things, and to deny that the plague is a sign of divine displeasure. Their message is largely secular and its advice medical, not theological, but it is given with a slightly worried glance at fellow and more fundamentalist theologians. I am reminded of Alexander of Tralles' comment that he could have included in his books many more sympathetic remedies, chants and

charms, but was prevented from so doing—presumably by theological difficulties, rather than by the opposition of his medical colleagues.⁶⁴

Alexander of Tralles, a member of a distinguished intellectual family, widely traveled, well read, and by no means uncritical in the selection of his material, reveals another side of medicine in the Christian empire—the emergence into acceptability of remedies that had earlier been excluded as "falling outside the profession of medicine." That phrase had been coined c. 60 A.D. by Scribonius Largus, rejecting a remedy for epilepsy that involved the blood of a gladiator. That was rejected also by Pliny, and by Galen, but it appears in Alexander⁶⁵ as a proven remedy, frequently given. Alexander also includes many other folk remedies, many spells, amulets and charms. These were not new—some can be found in the pages of Pliny—and the names of Pamphilus and Xenocrates remind us that not every doctor was as scrupulous as a Scribonius, a Dioscorides or a Galen. The papyri of Egypt, not to speak of the pages of Ammianus, show a growing acceptance, among all classes, of the power of such amulets and charms.⁶⁶ Sophronius, bishop of Constantia, was accused in 449 of astrology, phialomancy and other kinds of divination, and of corrupting thereby Peter the *archiatros*, who had read his books on astrology.⁶⁷ There is an obvious shift between Galen's time and that of Alexander in the definition of what is or is not medically and socially acceptable as a type of remedy. We should not regard the injunctions of Alexander to pick a mandrake with one's left hand, or the instructions he gives for the correct formula to be spoken over a sufferer from gout as being new or confined to him.⁶⁸ They can be found centuries earlier, but in what we would term magical texts, or in early Roman domestic medicine.⁶⁹

⁶⁰ D. W. Amundsen, *BHM*, 56 (1982), 334–42; cf. the (indiscriminate) collection of material in F. Bottomley, *Attitudes to the Body in Western Christendom* (London, 1979), 59–96.

⁶¹ Tertullian, *De anima* 30; contrast, *Anth. Pal.* VII.626.

⁶² Cyprian, *De mortalitate* 9.

⁶³ Ps.-Athanasius, *Quaest. ad Antiochum* 103, 104 (PG 28.662); Anastasius of Sinai, *Quaest. moral.* 114 (PG 89.765 f.). On the relationship between the two collections, see M. Richard, *Opera minora*, 3 (Louvain, 1977), n. 64, pp. 43–56. Cf. also the fragment of (ps.?) Athanasius on illness, *OCA*, 117 (1938), pp. 5–9.

⁶⁴ Alexander, I.573 Puschmann. See also, on Alexander, J. Duffy, below, p. 25 ff.

⁶⁵ Alexander, I.565 Puschmann; cf. Celsus, *De med.* III.23; Scribonius Largus, *Comp.* 17.

⁶⁶ Ammianus, *Hist.* XVI.8.1; XIX.12.14; XXVI.3.1–4; XXVIII.1.26–29; cf. A. A. Barb, "The Survival of Magic Arts," in A. D. Momigliano, *Paganism and Christianity in the Fourth Century* (Oxford, 1963), 100–125; P. Brown, *Religion and Society in the Age of St. Augustine* (London, 1972), 119–46.

⁶⁷ E. Honigmann, "A Trial for Sorcery," *Isis*, 35 (1944), 281–84.

⁶⁸ Alexander, II.585 Puschmann.

⁶⁹ W. H. S. Jones, "Ancient Roman Folk Medicine," *JHM*, 12 (1957), 459–72. Cf. L. Edelstein, "Greek Medicine in Its Relation to Religion and Magic," *BHM*, 5 (1937), 201–46 (= *Ancient Medicine* [Baltimore, 1967], 205–46).

Christianity, by its emphasis on prayers and spiritual songs, gave a sort of sanction to this white magic, within limits.

It also introduced, or re-introduced, into medicine the idea of demons and demoniac possession. The wolf-man wandering half naked among the tombs at night, derives his characterization in part from the gospels, in part from earlier medical texts.⁷⁰ A somatic explanation for madness is regarded as unusual even among doctors, who instead invoke demonic possession.⁷¹ We enter upon a world filled with angels and demons, in which sickness is viewed as a symptom of a battle between competing divine agents, and in which apparitions, sent by God or Satan, are common. It was the vision sent to the dying Theodoric that compelled him to express to his personal physician, Elpidius, his deep repentance for the murders of Boethius and Symmachus.⁷² Elpidius, doctor and deacon, ambassador, traveler, and restorer of a public bathhouse at Spoleto, knew demons when he saw them.⁷³ He is said to have been attacked by them, not only outside as they lay in ambush for him, but within his house, into which they pursued him throwing stones. In answer to his prayers, S. Caesarius came and exorcised the spirits who were afflicting him.⁷⁴

Whether or not one believes in this tale, it expresses one truth, that in late antiquity, medical men were willing to consider the intervention of demons and spirits as a cause of disease, and disease as some form of divine punishment for sins, far more openly than they had done in the time of Galen.⁷⁵ This change of perspective has never been satisfactorily investigated from the medical side, and

we should be wary of taking it as the result of such vague and unverifiable processes as Christianity's democratization of high culture.⁷⁶

One institution, however, does seem to owe its origin to Christian charity: the establishment of hospitals open to all members of the community and providing medical treatment, alongside a variety of other services. As is well known, Roman hospitals were restricted either to estate or domestic servants, or to the members of the army.⁷⁷ And, despite the claims of S. W. Baron, Jewish hospitals until the middle ages were hostels or hospices for pilgrims,⁷⁸ and similar hostels could be equally found at most pagan shrines, where, at great festivals, a city would also secure the attendance of doctors to look after its visitors.⁷⁹ But the Christian hospital, that combination of medical center, poor-house, old folks home, hostel and meeting place, does seem, both from its size and the variety of its functions, to be a new creation. The earliest is traditionally that of St. Basil at Caesarea in the 370s, almost a new city outside the walls, and his example was quickly followed: by Eustathius in Pontus, Pammachius at Ostia, Fabiola in Rome, Chrysostom in Constantinople.⁸⁰ There was a hospital in Hippo, and another at Ephesus, in the early fifth century, which had over seventy beds in the poor-house alone. Indeed, the impact of the hospitals was such that by the end of the fourth century a learned cleric, St. Nilus of Ancyra, could devote a

⁷⁰ Paul of Aegina, III.16, with Adams' commentary *ad loc.*: cf. also Luke, 8.27.

⁷¹ Philostorgius, *Hist. eccl.* VIII.10; I am not entirely persuaded by Edelstein's arguments, *Ancient Medicine*, 219.

⁷² Procopius, *Hist.* V.1.38.

⁷³ *Vita Aviti*, p. 181, calls him a deacon at Lyons; Avitus, *Ep.* 38; Ennodius, *Ep.* 384, calls him a doctor, cf. also *Epp.* 312, 437. The reference to his "Pontic rudeness," Ennodius, *Ep.* 445, may imply a visit to Constantinople, for he certainly knew Greek well, *ibid.* 384. Nevertheless, I think it unlikely that he is the Elpidius mentioned by Aeneas of Gaza, *Ep.* 19, as a well-known doctor at Gaza, *pace* L. M. Positano in her edition of Aeneas (Naples, 1950), *comm. ad loc.* On the bathhouse at Spoleto, Cassiodorus, *Var.* IV.24.

⁷⁴ *Vita S. Caesarii*, I.41.

⁷⁵ O. Böcher, *Christus Exorcista: Dämonismus und Taufe im Neuen Testament* (Stuttgart, 1972); A. J. Festugière, "Épidémies hipocratiques et épidémies démoniaques," *WSt*, 79 (1966), 157–64; together with the articles cited in nn. 66 and 69 above.

⁷⁶ H. Gertler, "Ärztliche Betrugereien im Rom der späten Kaiserzeit," in V. Beševliev and W. Seyfarth, *Die Rolle der Plebs im spätromischen Reich* (Berlin, 1969), 77–80; contrast the wise words of A. D. Momigliano, "Popular Religious Beliefs and the Late Roman Historians," *Studies in Church History*, 8 (1972), 1–18.

⁷⁷ G. Harig, "Zum Problem 'Krankenhaus' in der Antike," *Klio*, 53 (1971), 179–95.

⁷⁸ S. W. Baron, *The Jewish Community* (Philadelphia, 1948), 91 f.; *id.*, *A Social and Religious History of the Jews*, 8 (New York, 1958), 239.

⁷⁹ A. Hug, in *RE*, 18.3, 1949, cols. 520–29, *s.v.* Pandokeion; *Inscr. Olympia* I.62; *Inscr. Priene* 111; *Inscr. Ilion* 3. Healing shrines, both pagan and Christian, can be considered a primitive form of hospital, in that they provided a form of medical assistance particularly for the poor, but long stays there are uncommon, and the amount of medical attention and treatment open to question.

⁸⁰ For Basil, see T. Miller, below, p. 54; for Eustathius, Epiphanius, *Haer.* III.1 (PG. 42.504), almost simultaneously with Basil, and possibly even earlier; Pammachius, Jerome, *Ep.* 66; Fabiola, Jerome, *Ep.* 77; Chrysostom, Palladius, *Dial.* (PG 47.20), cf. Chrysostom, *Ad Stag.* III.13 (PG 47, 490), cf. *id.*, *Hom. in Matt.* 56 (PG 58.630). Note also the emergency and temporary actions of St. Ephraim at Edessa during a plague c. 370, Sozomen, *Hist. eccl.* III.16.

long simile to detailing the various medical activities found within the hospital.⁸¹

That the hospitals in some way answered a need is obvious from the comments of their founders, and I wish only to raise two caveats. While Temkin is surely right to stress the importance of Christian hospitals as centers for medical advice and even for instruction, evidence for a recognizable teaching function in the hospital, which we know of in eighth- and ninth-century Islamic hospitals, is hard to find before eleventh-century Constantinople.⁸² The Lives of Isaac the Protector and of Marathonius, which portray their heroes as leaving high society for menial tasks in a hospital, do not suggest a high degree of medical expertise or knowledge, even for the head of a hospital. But one should remember that in the Roman army, a man could equally move from being in charge of the camp hospital to being in charge of the military jail, and that administrative experience mattered perhaps more than acquaintance with Galen.⁸³ The introduction of formal teaching into the Byzantine hospital may thus owe much, if not all, to influence coming from the Arabs. Similarly, despite Dr. Miller's arguments,⁸⁴ material is still lacking that will enable us to judge whether the complexities of the Pantokrator hospital were the result of a natural development within the Byzantine hospital which in turn was adopted by the Arabs, or whether, as I think more likely, they were taken over from an Arabic tradition, perhaps itself deriving from Gondeshapur.⁸⁵

My second point is a plea for help. The chronicle of Joshua the Stylite is our best ancient evidence for the effect of famine and plague on a local community, and it graphically describes how in the years around 500 Edessa was hit by a series of natural calamities. The reaction of the authorities

was to set up more and more temporary hospitals, in the army camp, in the stoas, in the baths, to cope with the influx of patients from the town and its countryside.⁸⁶ An explanation purely in terms of filling a need is not enough to explain this change of attitude, which, within the space of a century, set the hospital in the front line of defence against illness. Medical historians need to look far more closely than they so far have at the sermons and literary texts about hospitals, and also at the various structural changes in society that may determine this new attitude.

One explanation may be that, after the chaos of the later third century, many of the former social and political ties, at both local and provincial level, had disappeared, and were replaced by a variety of different and overlapping systems of authority. In the West, we have the growth of big landed estates, with peasants being brought into almost fortified townlets. In the East, bishops like Gregory Thaumaturgus, Cyprian, or, later, St. Basil, take over some of the roles of the local aristocracy, for good or ill.⁸⁷ In the great Justinianic plague, St. Nicholas of Sion was suspected by the inhabitants of Myra in Lycia of engineering a food shortage in the town by banning the farmers from coming thither to market their produce. The local and provincial officials could not believe that this prudential decision was that of the farmers alone, and an unsuccessful attempt was made to arrest the saint.⁸⁸ We may be also getting a progressive fragmentation within the medical profession, between high and low class practitioners. The law codes indicate a growing power and influence for the court physician and his peers while the humbler local physician tries desperately to keep even the small privileges he has.⁸⁹ True, there is a constant tension between the financial needs of a community and a doctor's enjoyment of some degree of tax immunity at the community's expense, but the split between the court physicians, with their immense wealth and titles, and the lower men only adds to

⁸¹ Augustine, *Serm.* 356.10; Ephesus, *Acta Conc. Oec.* II.1.405 (A.D. 451); Nilus, *Ep.* III.33 (PG 79.397).

⁸² D. J. Constantelos, *Byzantine Philanthropy and Social Welfare* (New Brunswick, 1968), 152–84, gives a useful survey; Temkin, "Byzantine Medicine," 114 (= *The Double Face of Janus*, p. 220), but although there are doctors attached to hospitals, e.g., *CIG* 9256, I can find no secure evidence for formal teaching before the middle Byzantine period. A man like St. Sampson, *ActaSS*, June 27 (cf. PG, 115, 277–308), could have picked up his medical skills outside the hospital.

⁸³ John of Ephesus, *Lives* (PO 18.669); Sozomen, *Hist. eccl.* IV.27. For the careers of the (earlier) *optiones valetudinarii*, *ILS* 2117, 2437.

⁸⁴ In his article, "Byzantine Hospitals," in this volume.

⁸⁵ On the Pantokrator, see now P. Gautier, "Le typikon du Christ Sauveur Pantokrator," *REB*, 32 (1974), 1–145. On Islamic hospitals, a short introduction is S. Hamarneh, "Development of Hospitals in Islam," *JHM*, 17 (1962), 366–84.

⁸⁶ Joshua Stylite, *Chron.* XXVI, XXVIII, XLI–XLIII ed. Wright; cf. Sozomen, *Hist. eccl.* III.16; Hydatius, *Chron.* II.17–18.

⁸⁷ P. Brown, "The Rise and Function of the Holy Man in Late Antiquity," *JRS*, 61 (1971), 80–101; F. Millar, "Paul of Samosata, Zenobia and Aurelian: The Church, Local Culture and Political Allegiance in Third-Century Syria," *ibid.*, 1–17.

⁸⁸ *Vita Nicolai Sionitae*, ed. G. Anrich, *Hagios Nikolaos* (Leipzig, Berlin, 1913, 1917), I, p. 40; II, p. 243 f.

⁸⁹ *CTh* XIII.3; *CIC*, *CI* X.53; K. H. Below, *Der Arzt im römischen Recht* (Munich, 1953), 41–55; and the references in the next note.

this tension. The proud claim of Libanius, arguing on behalf of a civic doctor at Rhosus in Syria, that, though Philo himself is weak, the law is strong, rings somehow false against the implication of the law codes, that this law at least was eminently flexible.⁹⁰

There are other indications of a growing, formal series of hierarchies among what was still an open profession which anyone might join. I merely note: the foundation of the Roman College of doctors in 368, the first example of self-selection for a medical elite, but which I would interpret less as a gesture of imperial philanthropy than as another attempt by Valentinian to reduce senatorial patronage;⁹¹ the creation, both for Rome and for Constantinople, of a "count of the doctors" to take charge of all the doctors of the city;⁹² and, the legal division of even *archiatri* into various grades of social eminence.⁹³ The result will be, as we learn from a letter of Theodore of Studion, a whole variety of different grades and statuses for the medical profession,⁹⁴ which may indeed correspond more closely to the realities of a practice of healing whose providers ranged from the local barmaid up to the doctor to the emperor.⁹⁵

It would be wrong to conclude from this that late

antiquity was in any way unusual. Recent studies of fourteenth-century France, sixteenth-century Norwich, and seventeenth-century Tuscany have alerted us to the possibility of the coexistence of a wide variety of healers, with different levels of expertise, wealth and status.⁹⁶ True, there is in late antiquity a general expectation that doctors will make money, even if they come from humble backgrounds, and patients were at times wary of offers of assistance from doctors whom they suspected of planning to fleece them.⁹⁷ True, we have several examples of really wealthy doctors: Pegasus of Laribus, who could ransom a governor's nephew for fifty *solidi*, about ten years' pay for a soldier,⁹⁸ or two chief doctors of Africa whose annual retainers were of seventy or ninety-nine *solidi*, which, in exceptional circumstances, might be topped up with fees and gifts to equal the income of a major bishop;⁹⁹ Phoebammon of Antinoopolis had an annual retainer from the hospital of sixty *solidi*, boats, vineyards and other pieces of property.¹⁰⁰ Doctors donated mosaics at Cartenna, Tralles, Furni and Mactar, and paid towards a church at Aphrodisias.¹⁰¹ There were other local worthies: Alexander of Ephesus, whose statue stands proudly in the street of the Kouretes;¹⁰² Dionysius, doctor, priest and philanthropist, captured and then released by the Goths;¹⁰³ not to mention Scantia Redempta, whose merits surpassed the capacity of men to record them, and who numbered among her activities the practice of medicine.¹⁰⁴ Below them, we have

⁹⁰ Libanius, *Ep.* 723, referring to Julian, *Ep.* 75b. On the relationship between this letter and *CTh* XIII.3.4., see J. Gothofredus, *Codex Theodosianus* (Lyon, 1665), V, p. 30; W. Ensslin, "Kaiser Julians Gesetzgebungswerk und Reichsverwaltung," *Klio*, 18 (1922), 147 f.; V. Nutton, "Archiatri and the Medical Profession in Antiquity," *PBSR*, 45 (1977), 147 f.

⁹¹ *CTh* XIII.3.8, with my comments at "Archiatri," pp. 207–208, 217 f. It is worth stressing that the legal position of doctors in Rome before Valentinian was unique, and that there is no evidence for the creation of an exactly similar college, chosen from doctors by doctors, elsewhere in the Byzantine or Roman worlds. It may be significant that in the reconstituted *CIC*, *CI* XII.40.8, there is specific mention of the doctors at Rome, but not at Constantinople. It is unwise to posit on the evidence of a law directly relating to Rome that there must have been a replica of the college, founded and organized on exactly similar lines, at Constantinople, and, still more so, in cities elsewhere. Cf. also my article, "Continuity or Rediscovery? The City Physician in Classical Antiquity and Mediaeval Italy," in A. W. Russell, *The Town and State Physician in Europe* (Wolfenbüttel, 1981), 16–21.

⁹² Cassiodorus, *Var.* VI, 19; but the title of Vindicianus as *comes archiatrorum* (in Marcellus, *De medicamentis*, ed. Liechtenham [*CML* V, 2nd ed.], I, p. 46), may imply a creation for Rome under Valentinian. L. Deubner, *Kosmas und Damian* (Leipzig, 1907), 160. Himerius, *Or.* 34.

⁹³ *CTh* VI.16 (= *CIC*, *CI* XII.13.1); XIII.3.17–19.

⁹⁴ Theodore Stud., *Ep.* II.162 (PG 99, 1907–09).

⁹⁵ For the barmaid-midwife, Eunapius, *Vit. phil.* 463; on the variety of types of practitioner, Hordern, "Saints and Doctors," 10 f., has sound things to say, against H. Evert-Kappesowa, "The Social Rank of a Physician in the Early Byzantine Empire," *Mélanges I. Dujčev* (Paris, 1980), 139–64, whose article is based on a limited number of sources and contains many errors of interpretation.

⁹⁶ D. Jacquart, *Le milieu médical en France du XII^e au XV^e siècle* (Geneva, 1981); M. Pelling, C. Webster, "Medical Practitioners," in C. Webster, *Health, Medicine and Mortality in the Sixteenth Century* (Cambridge, 1979), 165–235, extended in M. Pelling, "Tradition and Diversity: Medical Practice in Norwich, 1550–1640," in *Scienze, credenze occulte, livelli di cultura* (Florence, 1982), 159–71; C. M. Cipolla, *Public Health and the Medical Profession in the Renaissance* (Cambridge, 1976), 67–124.

⁹⁷ Libanius, *Epp.* 1018, 1523 (where the οὐπω is significant); Sozomen, *Hist. eccl.* III.16.

⁹⁸ Procopius, *Hist.*, IV.17.14.

⁹⁹ *CIC*, *CI* I.27.1.41. Three other doctors received retainers of fifty *solidi* a year. Professors and teachers at Carthage were to receive seventy *solidi*, lawyers from fifty to seventy-two. On the possibility of extra from fees, see the comments of S. L. Greenslade, *JThS*, n.s. 16 (1965), 222. A contemporary bishop of Anastasiopolis, a middle-ranking see, had an income of 365 *solidi* a year, *Vita Theodori* Syk. 78.

¹⁰⁰ P. Cairo Maspéro 67151, A.D. 570; Phoebammon was the son (and brother?) of a civic physician.

¹⁰¹ *CIL* VIII. 9633 (*ILChV* 614), of A.D. 357; H. Grégoire, *Recueil des inscriptions grecques chrétiennes d'Asie Mineure* (Brussels, 1922), n. 123; *CIL* VIII.25811 (*ILChV* 606b); *AEpigr.*, 1952.49; Grégoire, *Recueil*, n. 272.

¹⁰² Good photograph in *ÖJhBeibl.*, 352 (1959), 363.

¹⁰³ *ILChV* 1233.

¹⁰⁴ *CIL* X.3980 (*ILS* 7805).

the wandering doctors: an Egyptian astrologer and doctor died at Ragusa in Sicily; another Egyptian after many journeys found his rest in Milan; a doctor from Claudiopolis in Asia Minor is buried at Verona; a Syrian, a Spaniard and two Gauls are recorded as *medici* in the Roman catacombs; and a Greek physician turns up in Spain at the end of the fourth century.¹⁰⁵ Nor can one say much about those doctors, both men and women, of whom nothing is known save their name, profession and place of burial, except that they existed, even in humble communities.¹⁰⁶ Poverty might even force a doctor to flee his responsibilities and disappear from the gaze of the taxman.¹⁰⁷ At the very bottom, there are the slaves, and here we have a serious problem. Excepting the *παῖδες ἰατρῶν*, who are far more likely to be apprentices, assistants, or even the doctors themselves than slaves,¹⁰⁸ I know of no text later than the third century which refers undisputedly to a slave or an ex-slave doctor, with the exception of two laws, of 530 and 531. These fix the maximum price for a slave doctor at sixty *solidi*, ten more than a secretary, and double the maximum for an unskilled slave.¹⁰⁹ Was Justinian legislating then for a nonexistent problem? Is this a piece of antiquarianism, like some of the laws reiterated later in the *Basilica*?¹¹⁰ The numbers of such slaves may well have been very small, certainly by comparison with the first century A.D., yet the context of these laws suggests that such slaves did exist. The first law is eminently practical, setting the maxi-

mum price to be paid by an owner who wishes to manumit a slave held in common, and here Justinian expressly imposes a solution upon an old and much discussed question. The second again deals with the price to be paid to co-owners, in this case for a slave left as a joint legacy, whom one owner wishes to purchase entirely for himself. Although the numbers of such disputed slaves cannot be known, and it may be doubted whether they were high even in the days of slave doctors in the first century, the law and Justinian's decision do suggest that they existed and had not disappeared entirely from the social scene.

The evidence I have put forward hardly permits firm conclusions about the status, or even about the practice, of medicine in late antiquity.¹¹¹ At best one can point to long-term trends, or to areas which seem worthy of further investigation, and this essay has aimed to sketch possible developments rather than establish unshakable conclusions. Yet there is one final impression that can be set forward, if only briefly. Compared with the first three centuries of the Roman Empire, the doctor in late antiquity has a much greater public profile beyond the confines of his city and civic life. He becomes a bishop, a church leader, even a saint; an ambassador, a provincial governor, even the Master of Offices.¹¹² Although I do not believe in the ancient tradition that associated the founding of the great medical school of Gondeshapur (Iran) with Greek physicians sent by the Emperor Aurelian in 271 or 272 to accompany his daughter to the Sassanian

¹⁰⁵ *Epigraphica*, 12 (1950), 99 (= S. L. Agnello, *Silloge di iscrizioni paleocristiane della Sicilia* [Rome, 1953], n. 68); *Epigraphica*, 10 (1948), 62 f., with the corrections of W. Peek, *ibid.*, 12 (1950), 27 f.; *IG XIV*. 2310a; *CIG* 9777; *CIL* VI.9597; *CIG* 9578; *AE* 1939, 162; *Vitae SS. Patr. Emeritensium*, ed. Garvin, IV.11.

¹⁰⁶ E.g., *MAMA*, III.167, 409, 528b, 617; VII.233; VIII.118; *RBibl.* (1905), 248; *Sammelbuch* 7316, 7488, 7491, 7493; *BCH*, (1880), 199; *Inscr. Syria* 1528; J. Jalabert, *Mél. fac. or. Beyrouth* (1906), 146; V. Beševliev, *Spätgriechische Inschriften* 98, cf. 184a; *CIG* 9209, 9669, 9792, 9977; *Epigraphica*, 6 (1944), 6; *ICVR* 1041, 5695; *ILChV* 255, 607, 608, 609, 613; *IG XIV*.604, 1529, 2406; *PBSR*, 37 (1969), 97 f.; G. Lefebvre, *Recueil des inscriptions grecques chrétiennes d'Égypte*, nos. 4, 496, 799. This list is not complete, and I have not listed clerics who are also physicians, e.g., *Inscr. Erythrae* 142.

¹⁰⁷ C. Wessely, *Stud. Pal.* 20.129 (A.D. 497), cf. Libanius, *Ep.* 756.

¹⁰⁸ Although, as Professor Renehan has shown, *Greek Lexicographical Notes* (Göttingen, 1975), 156 f., the phrase is regularly used as a circumlocution for "doctors," e.g., PG 59.137; 62.437; Aeneas Gaz., *Ep.* 20; *Suda*, s. ἀποπληξία, it can have a more specific use, e.g., Aristides, *Or.* 39.14; Julius Africanus, 20 Vieillefond; Origen, *Entretiens avec Héraclide* (P. Fouad), p. 162; Epiphanius, *Haer.* 51.1.

¹⁰⁹ *CIC*, *CI* VI.43.3.1; VII.7.1.5a; Below, *Der Arzt*, 9–11.

¹¹⁰ H. J. Scheltema, *CMH*, IV.2 (Cambridge, 1967), 66 f.

¹¹¹ I remain sceptical about almost all attempts to define the status of doctors in antiquity, since, for the most part, they are based on a few scattered pieces of literary evidence. In the absence of quantitative records, such as the sixteenth-century taxation lists, reliance on qualitative sources—i.e. comments by doctors, poets, historians—is essential. But great caution is necessary, and few of the essays at delineation have covered more than a fraction of the existing sources, or made satisfactory comparisons between medical and other similar groups like those of the *professores* and *grammatici*. The evidence of epigraphy has been largely neglected, and the criterion of judgment adopted has all too often been dependent on an anachronistic definition of who a doctor was. On the problems of interpretation, see my forthcoming article, "Verso una storia sociale della medicina antica," and "Murders and Miracle Cures: Lay Views of Medicine in Classical Antiquity," in R. S. Porter (ed.), *The Patient's View* (Cambridge, 1985).

¹¹² Respectively, Basil of Ancyra, Jerome, *Vir. ill.*, 89; Hieracas the heretic, Epiphanius, *Haer.* 67; St. Caesarius, Gregory Naz., *Or.* VII.; Maruthas of Martyropolis, Socrates, *Hist. eccl.*, VII.8, with J. S. Assemani, *BO*, 1725, III.1.73; Vindicianus, Augustine, *Conf.*, IV.3, cf. *id.*, *Ep.* 138; Theoctistus, Zacharias Schol., *Chron.*, V.1; V.4, cf. Photius, *Bibl.*, cod. 220. W. A. Fitzgerald, "Medical Men, Canonized Saints," *BHM*, 22 (1948), 635–46, is a useful, if somewhat uncritical, listing.

court,¹¹³ there can be no doubt of the significance of medical men in late antiquity as envoys and mediators between Byzantium and Persia.¹¹⁴ They appear in political negotiations between emperors, or between city and emperor, and the machinations of Joseph, doctor, politician and Catholicos of Seleucia, were notorious on both sides of the political frontier.¹¹⁵

Even a translator, Sergius of Resaena, turns out to have had a more than minor role to play in ecclesiastical diplomacy. Born at Antioch, he studied medicine at Alexandria before becoming civic physician at Resaena, on the Syrian frontier.¹¹⁶ It cannot be excluded that he spent some time also at the Persian court, for Agathias mentions a Sergius who translated into Greek a history of the kings of Persia.¹¹⁷ He was probably also a deacon, a friend of the great Patriarch of Antioch, Severus, and sufficiently acquainted with theological writers like Origen and Dionysius the Areopagite to compose his own tract on "Faith."¹¹⁸ He was also a distinguished translator, mainly of medical and philosophical writings, and it was largely through his versions that the Syriac and, indirectly, the Arab physicians derived their acquaintance with Galenic medicine.¹¹⁹

¹¹³ The tradition, which is found in Arabic and Syriac authors, e.g., Barhebraeus, *Chron.*, p. 56 Budge, is accepted by C. Elgood, *A Medical History of Persia*, (rev. ed. Amsterdam, 1979), 46, and, with varying degrees of scepticism about the influence of the school before the sixth century, by A. Siassi, "L'Université de Gond-i Shāpūr," *Mélanges H. Massé* (Teheran, 1963), 366–74; F. R. Hau, "Gondeschapur—eine Medizinschule aus dem 6. Jahrhundert n. Chr.," *Gesnerus*, 36 (1979), 99; H. H. Schöffler, *Die Akademie von Gondischapur* (Stuttgart, 1979), 29 f. The serious weakness of this late tradition is easily demonstrated: according to the Roman sources, the emperor Aurelian had no daughter, cf. *Vita Aureliani* 42. In its place I would set a gradual accretion of medical learning across a political, though, significantly, not a cultural or linguistic, frontier over several centuries.

¹¹⁴ I have not yet seen the article by R. C. Blockley, in *Florilegium*, 2 (referred to by Professor Baldwin, below, p. 17). The importance of doctors as ambassadors is acknowledged both by Greek historians, like Procopius and Menander, and by writers of Syriac chronicles. See, e.g., J. B. Chabot, "Synodicon Orientale," *Notices et extraits*, 37 (1902), 352, n. 1; *Chron. of Sirt*, PO, 7, pp. 136, 148, 161, 524. For the importance to a city of its doctor, Procopius, *Hist.*, XXVI.31 f. Cf. also N. M. Garsoian, "Le rôle de l'hérarchie chrétienne dans les relations diplomatiques entre Byzance et les Sassanides," *REArm*, n. s. 10 (1974), 119–38. A. J. Butler, *The Arab Conquest of Egypt*, 2nd ed. (Oxford, 1978), 135.

¹¹⁵ Zach. Schol., *Chron.* XII.7; *Chron. of Sirt*, PO, 7, pp. 176–81 (cf. p. 192, for another court doctor meddling in high ecclesiastical politics); Assemani, *BO*, III.1.433.

¹¹⁶ Zach. Schol., *Chron.* VII.10.

¹¹⁷ Agathias, *Hist.* IV.30, but this may be another Sergius.

¹¹⁸ Severus, *Epp.*, PO, XII.2, nos. 31, 85, 86; C. Brockelmann, *Geschichte der christlichen Literatur des Orients* (Leipzig, 1907), 42.

¹¹⁹ R. Degen, "Galen im syrischen," in Nutton, ed., *Galen, Problems*, 131–66.

Denunciations of him as "lustful after women, incontinent and greedy for money" or "a eunuch, corrupt and immoral" are perhaps to be treated less as fact than as the judgment of his opponents on his theological maneuvers.¹²⁰ In 535, having fallen out with Asylus, bishop of Resaena, he visited Ephraem, Patriarch of Antioch, to complain of his ill-treatment. Ephraem, concerned at the rising tide of Monophysitism, sent Sergius to Rome with a letter for Pope Agapetus, accompanied by a young architect from Amida, Eustathius. He was cordially received in Rome. But, on a second mission in 536 to the Patriarch of Constantinople, he was struck down with an unmentionable disease and died there in what his opponents regarded as deserved agony.¹²¹

Doctors are undeniably prominent in political and ecclesiastical negotiations in the fifth and sixth centuries, and it would be tempting to ascribe this feature to either a growth in the importance of physicians, or, with perhaps greater plausibility, to their abilities as bilingual (or even multilingual) men of culture, able to cross political frontiers and yet communicate in a shared language, usually Syriac. But court doctors have always been prominent or suspected of having a hand in political and dynastic dealings, and travels of physicians between the Greek world and the courts of the Near East had been known since the time of Democedes and Ctesias.¹²² The increased profile of the physician may perhaps be due as much to the bias of the sources—which reveal far more information about diplomacy than a Livy, a Tacitus or an Appian—as to any sudden rise of physicians as a class to historical eminence.

This survey ends tentatively, and with good reason, for much work still remains to be done before a proper history of medicine and medical ideas in late antiquity can be written. Yet, despite its essentially preliminary nature, it points to a series of truths that not all medical historians have been willing to believe. There is, for the period of late antiquity, a great variety of evidence, in both quantity and quality, which deserves study in its own right

¹²⁰ Zach. Schol., *Chron.* VII.10; Barhebraeus, *Hist. Patr.*, ed. Assemani, *BO*, II, p. 323. The Jacobite chronicle of 724 is a little milder, tr. J. B. Chabot, CSCO, *Script. Syr.*, ser. 3, IV.170.

¹²¹ *Ibid.*

¹²² Democedes, Herodotus, *Hist.* III.129–37; Ctesias, *FGrHist* (repr. Leyden, 1954), no. 688. For even earlier movement of "palace doctors," cf. E. Edel, *Ägyptische Ärzte und ägyptische Medizin am hethitischen Königshof* (Opladen, 1976).

and not just for its part in the transmission of Galenic ideas from the second century to the Arabs and the Renaissance. It reveals a medical world somewhat different from the static and forbidding picture painted by Bloch and even A. H. M. Jones—with new problems, and with new solutions. It represents a challenge to the historian, yet its rewards are substantial. Later essays in this volume will exemplify how much can be learned from even small sectors of a vast field, which still awaits its harvesters. The brevity of this exposition can thus be jus-

tified in the words of a late Alexandrian commentator on *Epidemics VI*, for, like Hippocrates, I am sowing the seed, and my selection of topics has been deliberately restricted in order to encourage others to use their judgment and their own powers of discovery.¹²³

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¹²³ Palladius, *In Epid. VI scholia* (p. 157 Dietz).